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The Effects of Repeated Readings on Fluency Transference with Dysfluent Readers in the Middle School

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THE EFFECTS OF REPEATED READINGS ON FLUENCY TRANSFERENCE WITH DYSFLUENT READERS IN THE MIDDLE SCHOOL

THESIS

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Abstract

The purpose of this study was to determine if improvement in middle school students' oral reading fluency through the Repeated Reading technique would transfer to their reading of new material.

Six dysfluent middle school students worked individually with the researcher twice a week. Each 20 minute session involved an initial recorded reading and subsequent recorded readings of a 150-300 word passage, until read at a rate of 100 words-per-minute or better. Passages were of narrative material at the subject's instructional reading level. Reading rate and word recognition accuracy were recorded graphically to enable the subject to monitor his/her progress. This process continued through six passages.

A single reading of a seventh passage was then recorded. Reading rate and word recognition accuracy were compared to previous readings. Examination of the data indicated that there was no educationally significant transference of oral reading fluency to the reading of new material for these subjects over the treatment period.

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CHAPTER I

Statement of the Problem

Purpose

The purpose of this study was to determine if the improvement in middle school students' oral reading fluency through the Repeated Reading technique transfers to their reading of new material.

Research Questions

1. When used with dysfluent middle school students, will the implementation of the Repeated Reading technique improve oral reading fluency?

2. Will any gains in oral fluency experienced in the program transfer to their oral reading of new material?

Need for the Study

Oral reading fluency is regarded as a major indicator of mastery of the skill of reading. Fluency is generally expected to develop on its own once basic decoding skills have been taught. But it has been shown that there is more to fluency than simply rapid word identification. This information is rarely, if ever, reflected in the reading curriculum employed in schools.

Research has demonstrated that oral fluency can be improved with elementary grade students using the Repeated Reading technique (Dowhower, 1987; Herman, 1985). It has also been shown that improvement in fluency transfers to new material with this population (Herman, 1985). Neill (1980) has claimed positive results at the junior high school level from use of the Repeated Reading technique, but actual data to support these claims are not included in his journal article.

What kinds of results can be expected from use of the Repeated Reading technique at the middle school level? This study addresses this question.

Definition of Terms

In this study these terms are defined as follows:

Dysfluent: Oral reading that is slow and choppy.

Fluency: Reading speed which approximates speaking rate. For this study fluency criteria is set at 100+ words read per minute with fewer than five uncorrected reading errors.

Morphological Cues: The understood meaning of one part of a word used to aid the reader in gaining the meaning of that word.

Prosody: Reading with the rhythmic and tonal features of speech. Prosodic features involve variations in pitch (intonation), stress (loudness), and duration (timing) (Dowhower, 1991, p.166).

Speech Phrase: A group of words that is spoken (or read) as a unit, with no pauses between the word. These phrases must make sense in the text and follow the punctuation of the sentence, e.g. commas and periods, and so on.

Syntactic Cues: The relationship between words in a sentence which help the reader group those words into appropriate speech phrases.

Transference: Maintaining the fluency level reached from one reading passage to the next.

Word Recognition Accuracy: The number of words correctly identified.

CHAPTER II

Review of the Literature

Purpose

The purpose of this study was to determine if the improvement in middle school students' oral reading fluency through the Repeated Reading technique transfers to their reading of new material.

Reading Mastery and Oral Fluency

How does the teacher of reading know when his student has achieved mastery? Allington (1983) has reviewed a variety of sources which support the view that oral fluency should be regarded as a necessary feature in defining good reading. He goes on to say that readers can be helped to acquire fluency through training, and that fluency training improves overall reading ability.

Several forms of oral fluency training have been developed, one effective form of which is the Repeated Reading technique. Anderson (1981) offers

a simple description of the procedure of Repeated Reading as proposed by Samuels (1979). He explains:

> To start a student on Repeated Reading, the child selects an easy, interesting story to read. The teacher marks off a short passage from the story (50-200 words) and the student prepares this material by reading and rereading. When the student is ready, the passage is read orally to the teacher, who records the speed and word-recognition errors on a graph. More practice reading follows, with another oral reading to the teacher recorded on the graph. This procedure continues until the rate of 85 words-per-minute is reached. Then another short passage is marked off for practice, oral reading, and recording on the graph. (p.175)

What is Oral Fluency?

Why do some students have trouble developing oral fluency while others do not? In order to understand the problem, first we must look at what oral fluency is and how it develops. LaBerge and Samuels (1974) claim that fluent readers decode text automatically. When the reader decodes automatically his reading speed approximates his speaking rate, and comprehension is good because his cognitive energy can be directed toward processing meaning. Perfetti (1977) suggests that a reading rate much slower than one's speaking rate would obstruct the reader's ability to hold text

information in memory, therefore obstructing comprehension (as reported in Mathes, Simmons, & Davis, 1992).

It would then follow that the non-fluent reader needs to further develop his decoding skills. This understanding alone may lead the reading teacher to concentrate instruction to letters, sounds, or words in isolation. But Dahl and Samuels (1974), in their study of a high-speed word recognition program, showed that merely learning to recognize isolated words quickly did not produce fluent reading. This addresses what Nathan and Stanovich (1991) refer to as "word calling", where words are pronounced quickly and accurately but not understood. This breakdown in the production of meaning can, at least partly, be attributed to the word caller's failure to recognize the syntactic structure of sentences in written material (Schreiber, 1991).

Schreiber (1980) first suggested that fluent reading results from the discovery and development of various morphological and syntactic cues. This means that the reader, using the meanings and connections between the words in the sentence, learns to group written words into appropriate

speech phrases. In oral language, phrase boundaries are generally marked through intonation. Written language provides few graphic signals for the prosodic features of the language. He goes on to propose that the Repeated Reading technique works because it requires that the reader use appropriate phrasing in order to meet fluency criteria. Dowhower (1991) also indicates that Repeated Reading helps the dysfluent reader prosodically. The basis for fluency development with Repeated Reading is the reader's tacit recognition of the phrasal structure of sentences (Schreiber, 1991).

A study performed by Stoddard, Valcante, Sindelar, O'Shea, and Algozzine (1993) attempted to determine if the addition of intonation cues, cues that would assist students in determining the proper intonation for written material, would significantly increase students' reading rate or comprehension with fourth- and fifth-graders. They found that their attempt to override the students' need to discover and develop their ability to use morphological and syntactic cues was not effective. No significant increase in students' reading rate or comprehension was found in this investigation.

Using a different technique to assist poor readers to increase reading speed and comprehension, a study using phrased text was investigated (Taylor, Wade, & Yekovich, 1985). Phrased text is text arranged on the page in phrase units, one phrase per line. This study found that the practice of text in its normal format was actually superior to the artificially phrased text in improving reading rate and students' level of comprehension.

Characteristics of Repeated Reading's Effectiveness

Several studies using the Repeated Reading technique have achieved various rates of success in improving readers' oral fluency. In order to understand what may cause these success variations, Rashotte and Torgesen (1985) set out to determine the extent to which the effectiveness of Repeated Reading is dependent on passage characteristics. Twelve non-fluent learning disabled students in grades two through five read passages off a computer screen. These reseachers set a fixed number of repeated readings for each passage, one having a high rate of word overlap, one with a low rate of word overlap, and a set of non-repetitive passages.

They found the repeated readings to be significantly more effective in increasing reading rate with a higher degree of overlapping words.

Perhaps Moyer (1982) has the best explanation for these results. He concluded that increased gains in reading fluency occur because the repeated reading of a single passage maximizes redundancy. Redundancy involves the reduction of the amount of information available to be processed. All beginning reading programs apply the theory of redundancy. In any program, students are presented the same limited amount of material until they have it mastered. As with Repeated Reading, repetition of a reading passage gives the dysfluent reader needed practice in word analysis as well as in using morphological and syntactic cues to form appropriate speech phrases.

Herman (1985) conducted a study to identify aspects of reading and fluency that change with repeated practice: specifically, reading rate; speech pauses; and word recognition accuracy. Also a goal of this study was to determine if improvements in any of these areas was limited to well-practiced material or if, after considerable

practice, improvements would transfer to new, unpracticed material. Her subjects were eight intermediate-grade students. As expected, results showed continual improvement in reading rate, and a decrease in miscues. Upon examination of speech pauses, it was found that there was no decrease in the number of speech pauses, only in the length of those pauses.

Gonzales and Elijah (1975) reported similar results using the Repeated Reading technique. They investigated the difference in word recognition errors for students on their first oral reading as compared to their second oral reading of the same passage. Overall word recognition errors decreased on the second reading.

Variations on the Repeated Reading Technique

Perhaps in an attempt to improve upon the standard Repeated Reading technique, several variations of this standard procedure have been investigated. These variations are discussed in this section. One type of variation involves the effect assistance, in the form of oral previewing, has on fluency gains. Another compares the effects

on gains in fluency of two types of mastery criteria, a set number of successive improvements versus criterion reading rate. A third study variation examined the effect using a fluency cue versus a comprehension cue prior to reading had on fluency and comprehension. Each of these variation studies reported positive results to varying degrees.

Dowhower (1987) investigated the effect of Repeated Reading procedures on second-grade students' reading performance. Her study was designed to discover the effect assistance had on this procedure. The assisted group listened first to each passage on tape. When they could read simultaneously with the fluent reader, the students were encouraged to rehearse the passage without the tape until a rate of 100 words-per-minute was reached. Results showed significant gains in students' mean scores in reading rate, accuracy, and comprehension. The overall effect on prosodic reading showed significant increases in appropriate phrasing for both the assisted and the non-assisted group. Only the assisted group showed significant improvement in appropriate intonation.

Weinstein and Cooke (1992) compared the effects on fluency gains of two types of mastery criteria for repeated reading. One intervention required students to reread a passage until they demonstrated three successive improvements; the other intervention required rereading until the criterion reading rate of 90 words per minute was reached. Both types of criteria resulted in fluency gains for all students.

While also using a set number of rereadings, O'Shea, Sindelar, and O'Shea (1985) examined the effectiveness of cueing readers to read for fluency, and the effectiveness of cueing readers to read to remember what they have read (comprehension). As may be expected, readers cued to fluency read more words per minute, while readers cued to comprehension retold a greater proportion of propositions. When the comprehension cue was combined with repeated readings, both fluency and comprehension increased.

Again this same study was performed, this time with the expressed purpose of comparing the performance of elementary-aged instructional-level readers with elementary-aged mastery-level readers

(Sindelar, Monda, & O'Shea, 1990). The results of this study were comparable to the results of the previous study for both the instructional-level readers as well as the mastery-level readers. Their findings suggest that "increases in reading fluency with instructions to recall as much as possible about a passage may constitute a sufficient precondition for improved comprehension" (p.224).

Not all studies that used a variation in the Repeated Reading procedure produced such positive results on reading fluency. The two studies sited here share the common variation of setting a fixed number of repeated readings rather than a set criterion rate. Inspection of the reading rate graphs for each individual reader in Rashotte and Torgesen's (1985) study indicates that there was considerable variability in the individuals' performances in each condition. Some readers increased their reading fluency while others showed little or no improvement.

Findings from a study performed by Homan, Klesius, and Hite (1993) were consistent with Rashotte and Torgesen's (1985). Homan, et al. (1993) sought to determine if the effect of the

Repeated Reading procedure was significantly greater than that of assisted nonrepetitive reading methods i.e. echo reading and unison reading, on reading performance. Their subjects were sixth-grade Chapter 1 students. Results indicated that there were no significant differences between the Repeated Reading method and the assisted nonrepetitive reading methods.

A Key Factor: Motivation

Results from the two aforementioned studies point up another inherent advantage of the Repeated Reading technique as proposed by Samuels (1979); the motivation factor. The motivation for rereading with Repeated Reading is the student's awareness of improvement made in his reading rate and word recognition accuracy from one reading to the next. Neither of the two studies in point provided their readers with a purpose for their rereadings. The authors of the Homan, Klesius, and Hite (1993) study reveal their awareness of this vital factor in their statement that students, especially older students, need to be given a purpose for their rereading.

Variations in the Repeated Reading technique can be successful, if the motivation factor is involved. The motivation in the Weinstein and Cooke (1992) study was the reader's awareness of his improvement from reading to reading. It seems that simply cueing the reader to read for improved fluency (O'Shea, Sindelar, & O'Shea, 1985), or even to read for comprehension (Sindelar, Monda, & O'Shea, 1990), provides the reader with an expressed purpose for rereading. Blum (1991) states "increased knowledge and awareness of improvement provides considerable motivation for continued practice" (p.197).

Perhaps the most enthusiastic about the motivation that Repeated Reading provides is Neill (1980). He states that "The positive results of the procedure were supported when 12 of the 16 students requested to try it again" (p. 64). Surely, one of the highest acclamations that can be made for any reading activity is also made by Neill (1980), "It turned kids on to reading who had previously been turned off" (p.64).

CHAPTER III

Design of the Study

Purpose

The purpose of this study was to determine if the improvement in middle school students' oral reading fluency through the Repeated Reading technique transfers to their reading of new material.

Methodology

Subjects: The six subjects chosen for this study were sixth- (n=1) and seventh- (n=5) grade students who had been identified by their teachers as dysfluent. Teacher recommendation for this Repeated Reading treatment was based on the student's ability to decode words accurately, yet who needed to increase reading fluency and comprehension. Consideration was also made to the student's attendance history which would indicate the probability of his/her completing the program in the time allotted These students attended a middle

school in the Rochester City School District.

Materials: Narrative materials were chosen for this study in the hopes that subjects would increase their reading rate not only by improving their word recognition speed and accuracy, but also by improving their prosody.

Material selected for each subject was based on his or her instructional reading level. This level was determined by preliminary Repeated Reading trials. Material level was deemed instructional when the subject's initial reading rate of a passage from that material fell below the criterion rate of 100 words per minute, and for the second reading of the same passage the subject improved his rate to criterion level or better.

The six passages used for the Repeated Reading treatment were chosen by the researcher from the material determined appropriate for each subject. The seventh passage used to determine the degree of fluency transference was chosen from the same material the subject used for the Repeated Reading treatment. Each passage contained 150-300 words.

A graph for each subject was used to record

reading rate and word recognition accuracy for all passages read by that subject.

In order to ensure accuracy in measuring reading rate and word recognition accuracy, an audio tape recorder was used to record each reading.

Procedures

The sessions with each subject who participated in the Repeated Reading program were held twice a week, for approximately 20 minutes, over a three week period.

The researcher met individually with each subject for each session. Each session started out with a review of the progress made at the previous session by examination of the subject's graph of reading rate and word recognition accuracy (see Appendix). Once the graph had been reviewed and discussed, it was put away and the subject would then prepare to read the appropriate passage. The number of words contained in each passage had previously been counted by the researcher in order to give immediate feedback to the subject on his reading rate for that passage. The subject would then read aloud the passage, unassisted, into the

tape recorder, while being timed by the researcher. Immediately following the reading the researcher would provide the subject with feedback. This feedback consisted of: the rate at which the passage was read, correction of any mispronounced or unknown words, and clarification of any lapses in comprehension as indicated by the reader's breakdown in prosody.

Unless the initial reading of any passage was read at a rate of 100 words per minute or better, a second reading by the subject would then be recorded. Again, this reading would be followed by feedback to the reader. If this second reading was not read at the criterion rate or better, a third reading would be recorded. Recorded readings and feedback would continue until the passage was read at a rate of 100 words per minute or better.

Between sessions, the researcher would listen carefully to the taped reading to verify the accuracy of the timing, and to tally word recognition errors. Miscues were counted as errors when it changed the meaning of the text or if made no sense in the surrounding text. Self-corrected miscues did not count as errors. The information

gathered from the recorded readings was then plotted on the subject's graph for review by the subject at the following session.

Six passages from narrative material at the subject's instructional level were read and reread until the subject read at criterion rate or better. A seventh unrehearsed passage from the same material was read by each subject immediately following the reading of the sixth passage at criterion level to determine the degree to which any fluency gains made with Repeated Reading transferred to the reading of unrehearsed material.

Analysis of Data

For each subject who participated in this Repeated Reading treatment, the reading rate from the seventh unrehearsed passage was compared to the rates of the initial readings of each previously read passage. These results were then analyzed to determine if there was evident any educationally significant transference of oral reading fluency over the treatment period.

Additionally, all anecdotal data were analyzed qualitatively to determine what other factors, if

any, may have had an influence on the results of this study.

CHAPTER IV

Analysis of Data

Purpose

The purpose of this study was to determine if the improvement in middle school students' oral reading fluency through the Repeated Reading technique transfers to their reading of new material.

Findings and Interpretations

Subject #1

Table 1 Reading and accuracy rates for Subject #1

		passage 1	2	3	4	5	6	7
trial	1	96*	94*	88*	97*	118*	101*	91*
		5**	4**	3**	2**	5**	6**	7**
	2	115*	119*	109*	126*			
		4**	2**	2**	1**			

*words-per-minute, criterion rate= 100

**errors in word accuracy

Subject #1 was very cooperative, and initially concerned mainly with her word accuracy. Her low word accuracy error rate is indicative of her care for an accurate reading.

Subject #1's reading rate shows that her one rehearsal of each passage was sufficient to raise her rate from just under the criterion rate to above it. By her fifth reading passage, Subject #1 had gained enough confidence and familiarity with the material to read above the criterion rate on her first trial.

It was at this point, when her reading rate increased, that Subject #1's word accuracy errors also increased. This may actually be a result of her increased fluency in that she may be freeing herself from the print and becoming less concerned with the accurate pronunciation of individual words.

The classroom teacher reported that Subject #1 showed a tremendous improvement in her level of confidence with in-class oral reading.

Data from Subject #1 indicate that improvement in her oral reading fluency through the Repeated Reading technique did not transfer to her reading of new material.

Subject #2

Table 2 Reading and accuracy rates for Subject #2

		passage					
	1	2	3	4	5	6	7
t 1	87*	90*	85*	101*	94*	90*	88*
r	3**	5**	8**	1**	3**	1**	2**
i 2	117*	109*	94*		115*	123*	
a	2**	3**	5**		3**	0**	
l 3			114*				
			5**				

*words-per-minute, criterion rate= 100

**word accuracy errors

Though English is his second language, Subject #2 displayed a high level of prosody in his reading, using appropriate speech phrases.

His very low word accuracy error rate exemplifies his concern with his word accuracy.

Subject #2 was cheerful, enthusiastic, and cooperative. He responded very positively to the feedback he received from his reading rate graph and researcher comments. Subject #2 was eager to please, wanting to take the book to practice reading it at home.

Examination of initial trial reading rates do not indicate that his unrehearsed reading rate improved much, even with increased familiarity with the material. But one rehearsal appeared to be plenty for Subject #2 to significantly improve his reading rate and exceed the criterion.

The classroom teacher reported a dramatic improvement in Subject #2's attitude toward his in-class oral reading.

Data from Subject #2 indicate that improvement in his oral reading fluency through the Repeated Reading technique did not transfer to his reading of new material.

Subject #3

Table 3 Reading and accuracy rates for Subject #3

	passage						
	1	2	3	4	5	6	7
t 1	88*	85*	93*	93*	92*	93*	95*
r	3**	6**	4**	3**	5**	1**	1**
i 2	113*	100*	95*	113*	108*	111*	
a	3**	5**	1**	1**	1**	0**	
l 3			105*		118*Δ		
			4**				

*words-per-minute, criterion rate= 100

**word accuracy error

Δself-requested retrial

Subject #3 exhibited behaviors that indicated he had low self-esteem. He avoided making eye contact with the researcher and was concerned about the protection of his performance and identity. Subject #3 was also easily distracted by the noise and presence of other people in the room.

Examination of initial reading trial rates of each passage show some improvement in unrehearsed reading rate. Though easily distracted, Subject #3 needed only one exposure to the passage in order to

raise his reading rate to criterion level or better.

Subject #3 reacted very positively to the feedback he received from the reading rate graph and researcher comments. He was so highly motivated to improve his reading rate that Subject #3 requested the opportunity for an additional reading trial in order to further raise his rate above the criterion level. His classroom teacher also reported an improved positive attitude and confidence level toward in-class oral reading.

Data from Subject #3 indicate that improvement in his oral reading fluency through the Repeated Reading technique did not significantly transfer to his reading of new material.

Subject #4

Table 4 Reading and accuracy rates for Subject #4

		passage					
	1	2	3	4	5	6	7
t 1	99*	75*	80*	78*	87*	88*	92*
r	4**	5**	5**	5**	6**	8**	3**
i 2	117*	92*	100*	100*	105*	114*	
a	4**	1**	2**	3**	0**	5**	
l 3		103*			150*Δ		
		1**					

*words-per-minute, criterion rate= 100

**word accuracy errors

Δself-requested retrial

Subject #4 was cooperative, very excited and distractable. Her classroom teacher referred Subject #4 for this Repeated Reading treatment not only because of her reading dysfluency, but also because of her poor comprehension level of reading material. One factor in Subject #4's poor comprehension level became evident with her first reading. Subject #4 did not have the same concern for reading accuracy that most of the other subjects displayed. She would either skip many of the

smaller words in the passage, or completely misread them. She would also disregard punctuation in print. Subject #4 was eager to please, and when she was instructed to slow down, rather than to read fast, and instructed to attend to each word and punctuation, her comprehension of the passage improved.

Examination of reading rate from her first trial to her second trial reveals that Subject #4 was able to greatly increase her reading rate, with a significant reduction in word accuracy errors, after only one reading. Subject #4's perception was that she was slowing down in her reading when, to her surprise, her reading rate graph showed her she was actually increasing her reading rate.

Subject #4 responded so positively to feedback from the reading rate graph that she requested an additional reading trial to see how much further she could improve her reading rate with an additional rereading.

Data from Subject #4 indicate that improvement in her oral reading fluency through the Repeated Reading technique did not transfer to her reading of new material.

Subject #5

Table 5 Reading and accuracy rates for Subject #5

		passage						
		1	2	3	4	5	6	7
t	1	87*	86*	95*	113*	90*	89*	94*
r		3**	2**	1**	0**	1**	3**	3**
i	2	91*	95*	108*		113*	107*	
a		2**	1**	3**		0**	3**	
l	3	92*	104*					
		3**	1**					
	4	106*						
		3**						

*words-per-minute, criterion rate= 100

**word accuracy errors

Subject #5 appeared to be quiet, slow, and uninterested. Her reading also displayed these characteristics. In her slow reading Subject #5 seemed to be giving herself a chance to preview each word in order to pronounce it properly. This is evidenced in her very low word accuracy error rate. Although slow, Subject #5 read with a expression and appropriate speech phrases, exemplifying a high degree of prosody in her reading.

Examination of reading rates for the first four passages read by Subject #5 shows much improvement between passages. There was so much improvement that she went from needing four trials on the first passage to reach the criterion rate, to reading above criterion rate on the first trial of her fourth passage. Had the treatment ended there, it could have been concluded that there was, in fact, transference of oral reading fluency to new material. But the treatment did not end there.

Data from Subject #5 indicate that improvement in her oral reading fluency through the Repeated Reading technique did not transfer to her reading of new material.

Subject #6

Table 6 Reading and accuracy rates for Subject #6

		passage						
		1	2	3	4	5	6	7
t	1	98*	88*	102*	107*	115*	103*	106*
r		2**	3**	3**	1**	1**	1**	2**
i	2	115*	113*					
a		3**	6**					
l								

*words-per-minute, criterion rate= 100

**word accuracy errors

Subject #6 was pleasant, quiet, and cooperative. Her reading was clear and concise. Subject #6's concern for accuracy is evidenced by her low word accuracy error rate.

Though her initial reading rate was so near criterion rate, Subject #6 shows improvement in her reading rate between passages, through the fifth passage. Examination of reading rates up to this point only would seem to indicate transference of fluency. But the treatment did not end at the fifth passage.

Data from Subject #6 indicate that improvement

in her oral reading fluency through the Repeated Reading technique did not transfer to her reading of new material.

Summary

When data from the Repeated Reading treatment are examined individually for each subject it can be determined that, when used with dysfluent middle school students, the implementation of the Repeated Reading technique can improve oral reading fluency.

It can also be determined, by examination of the data, that any gains in oral fluency experienced in this program did not transfer to the subject's oral reading of new material.

CHAPTER V

Conclusions and Implications

Purpose

The purpose of this study was to determine if the improvement in middle school students' oral reading fluency through the Repeated Reading technique transfers to their reading of new material.

Conclusions

While the implementation of the Repeated Reading technique was found to improve oral reading fluency with dysfluent middle school students, those gains in oral fluency were not found to transfer to their reading of new material.

In addition to the improvement of oral reading fluency, other positive results were found with the the implementation of the Repeated Reading technique. Not the least of those results was the observed improvement in the attitude of the research subjects' attitude toward reading. The reports by

the classroom teacher of increased confidence of the research subjects toward their in-class oral reading lead to an increase in their in-class reading time.

This increase in in-class reading time augmented the intensive reading done during the Repeated Reading sessions. Though intensive, the Repeated Reading sessions were highly anticipated by each subject involved. This enthusiasm for the program may have been a result of the positive feedback the subject received from the graphing of his progress, and/or it may have been a result of the individual attention the subject received during the treatment period, though that time amounted to less that one hour a week.

Although this treatment study did not result in significant gains in transference of oral reading fluency to the reading of new material for those subjects involved, it may be the impetus that moves these students toward reading growth. Through an improved attitude toward reading, and an increased confidence in their ability to read, these students increase their reading time, thereby precipitating their reading growth.

Implications for Further Study

It has been determined in this study that the improvement in oral reading fluency did not transfer to the reading of new material by the subjects in this treatment period. And though that is true, as determined from the data, there does seem to be a trend emerging from that data that would indicate the possibility of some fluency transference. What this implies is the need to extend the treatment period in order to verify the existence of this trend. The initial Repeated Reading sessions may be needed to establish the routine of procedures for the sessions, and for the subject to become comfortable with those procedures.

Also, a longer treatment period may be needed, especially at the middle school level, to work on modifying the non-prosodic reading style these students may have formed through their elementary school years.

Another aspect of this Repeated Reading technique that may benefit from further research is the criterion reading rate that is predetermined for each student. At earlier grade levels the proposed criterion rate of 85-100 words per minute (Dowhower,

1987; Herman, 1985; Samuels, 1979) may be sufficient to improve fluency by increasing word identification rate (LaBerge & Samuels, 1974). But by the middle school level, higher criterion rates may need to be set in order to improve prosody, and thereby increase comprehension (Nathan & Stanovich, 1991; Perfetti, 1977).

Implications for Classroom Use

The Repeated Reading technique can prove to be beneficial for the dysfluent middle school student. In addition to the benefit of improved oral reading fluency, the dysfluent middle school student may also gain some degree of self-esteem as a reader from the positive feedback this technique offers the student. Middle school students can find this technique highly motivating. The Repeated Reading technique may increase time spent in the reading process through the intensive program itself, and also by improving the attitude of the dysfluent reader toward reading.

The tremendous advantages of the flexibility of the Repeated Reading technique for use in the classroom are many. One valuable advantage is the

flexibility of working with students are widely varying reading levels. Because each student reads material at his or her own reading level, every reader can experience success with this technique.

In addition to meeting the needs of every student, the Repeated Reading technique can meet the needs of every classroom. A single session takes little time (10-15 minutes). Sessions can be held in the classroom or outside the classroom. And the teacher does not need to be present at the sessions. Readers engaged in Repeated Reading can read to a paraprofessional, parent, volunteer, peer, or even just into a tape recorder.

Once students become proficient with the Repeated Reading technique, they may assume it as a personal strategy to further improve their fluency and comprehension outside of the classroom.

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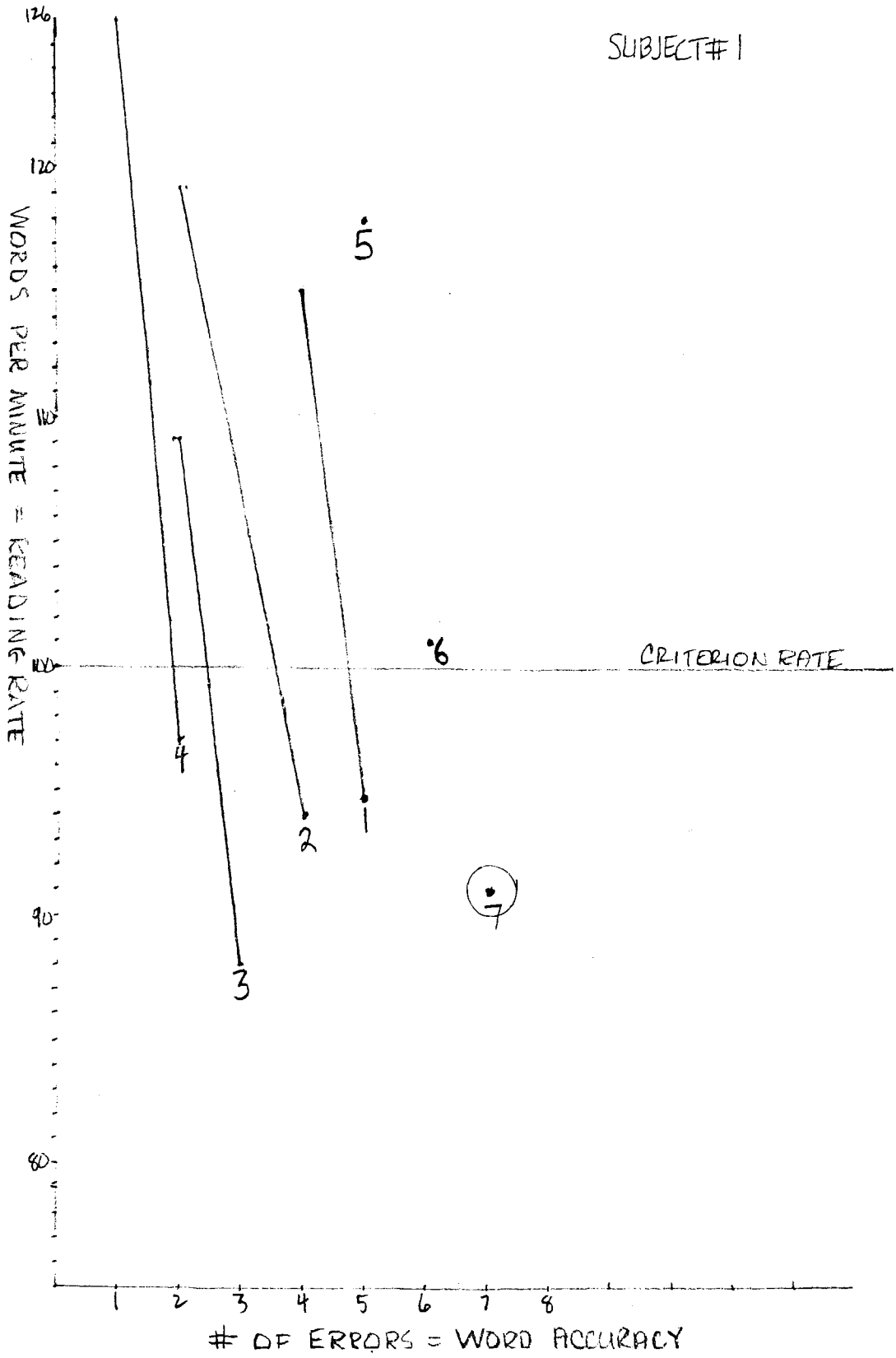
APPENDIX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CRITERION RATE
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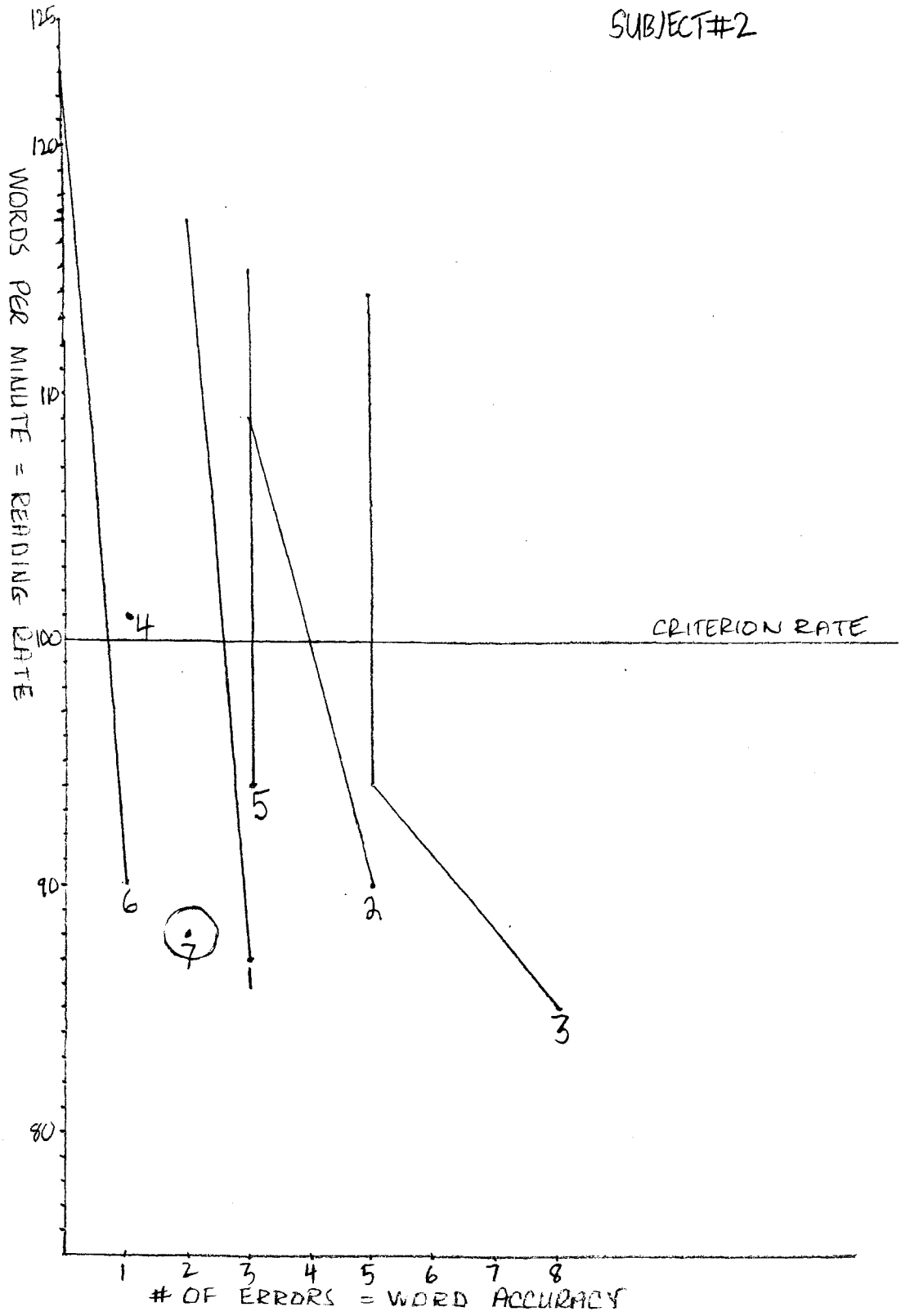
4
5
6
7
1 2 3 4 5 6 7 8
OF ERRORS = WORD ACCURACY

SUBJECT#2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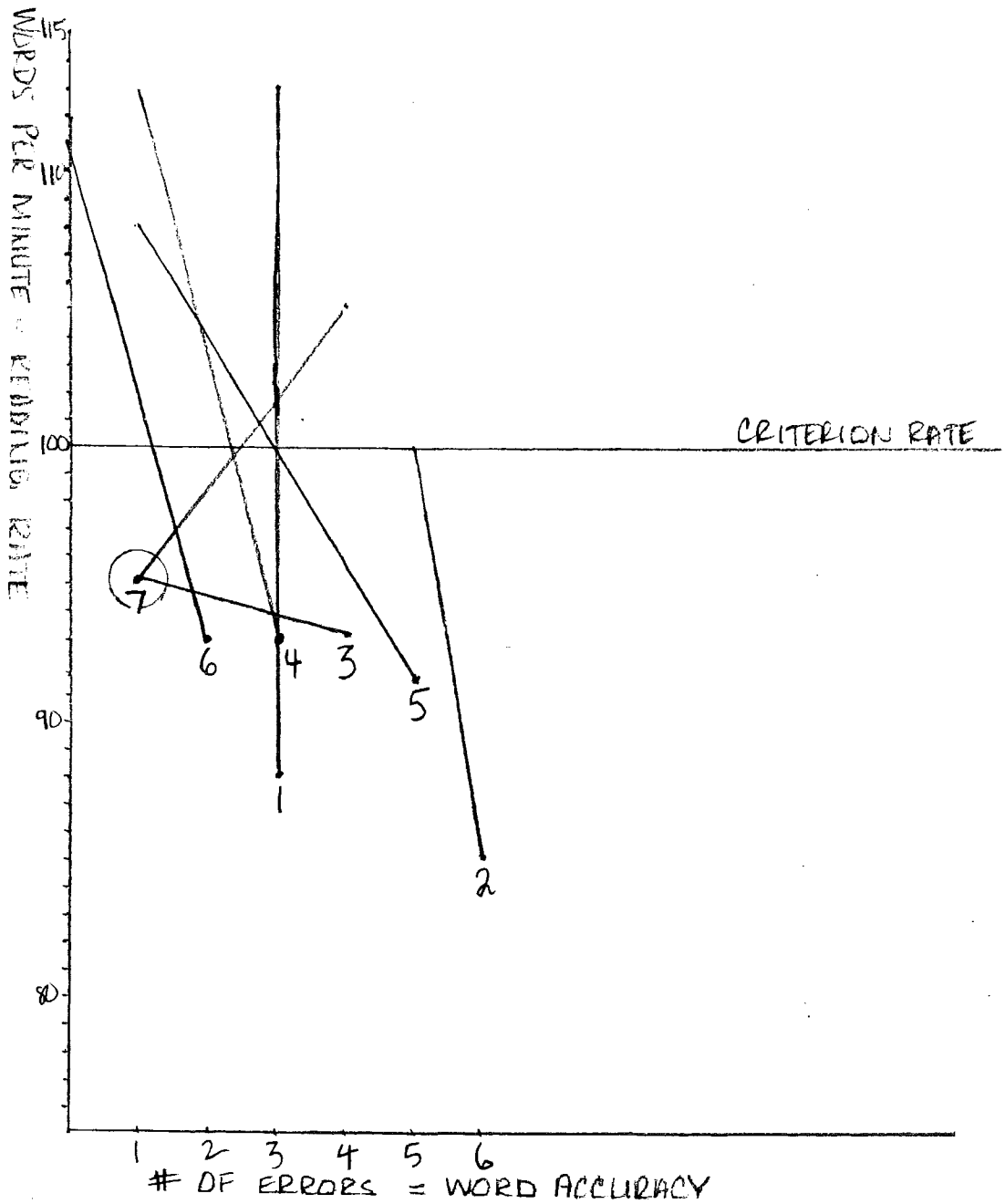
OF ERRORS = WORD ACCURACY

SUBJECT #3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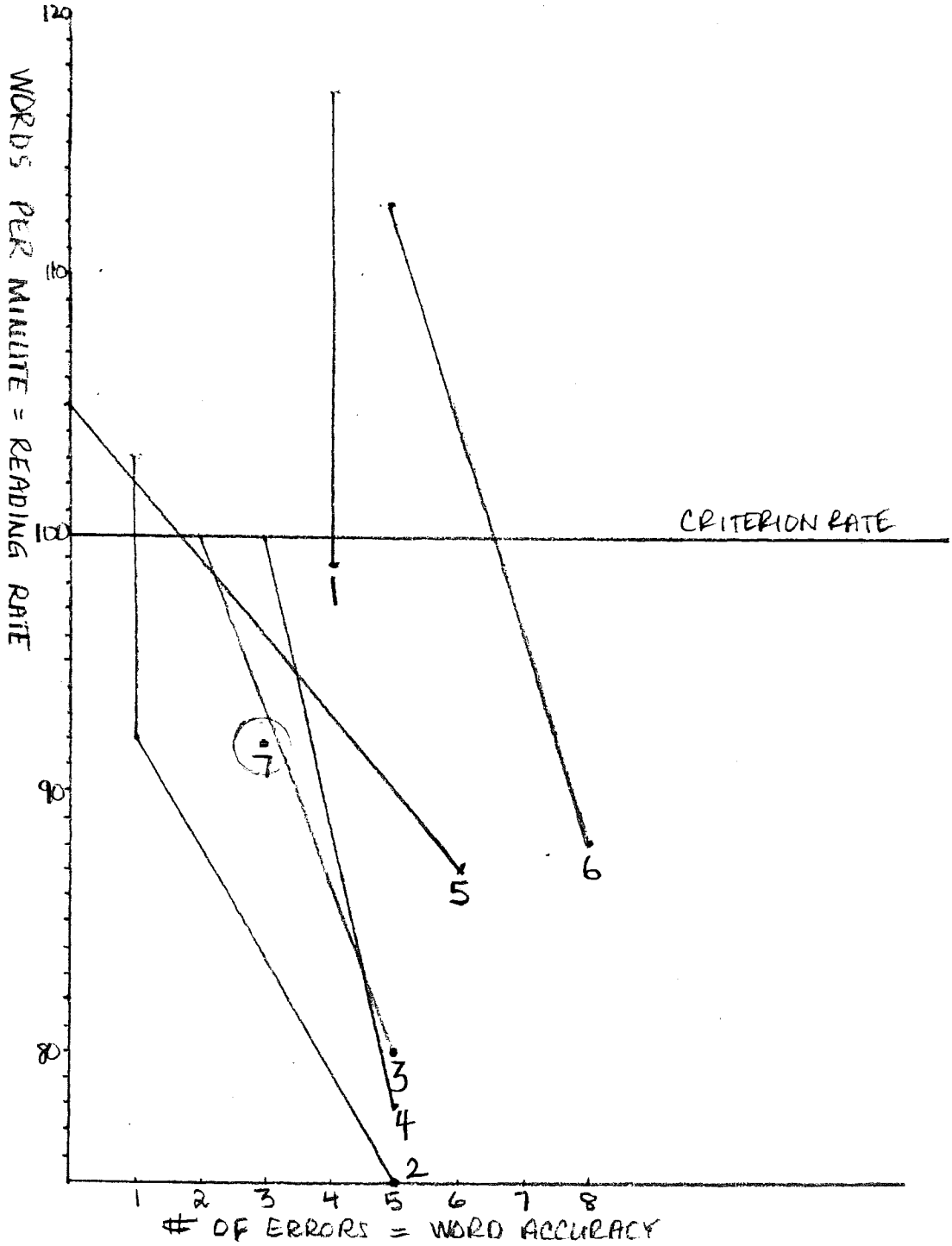
OF ERRORS = WORD ACCURACY

SUBJECT #4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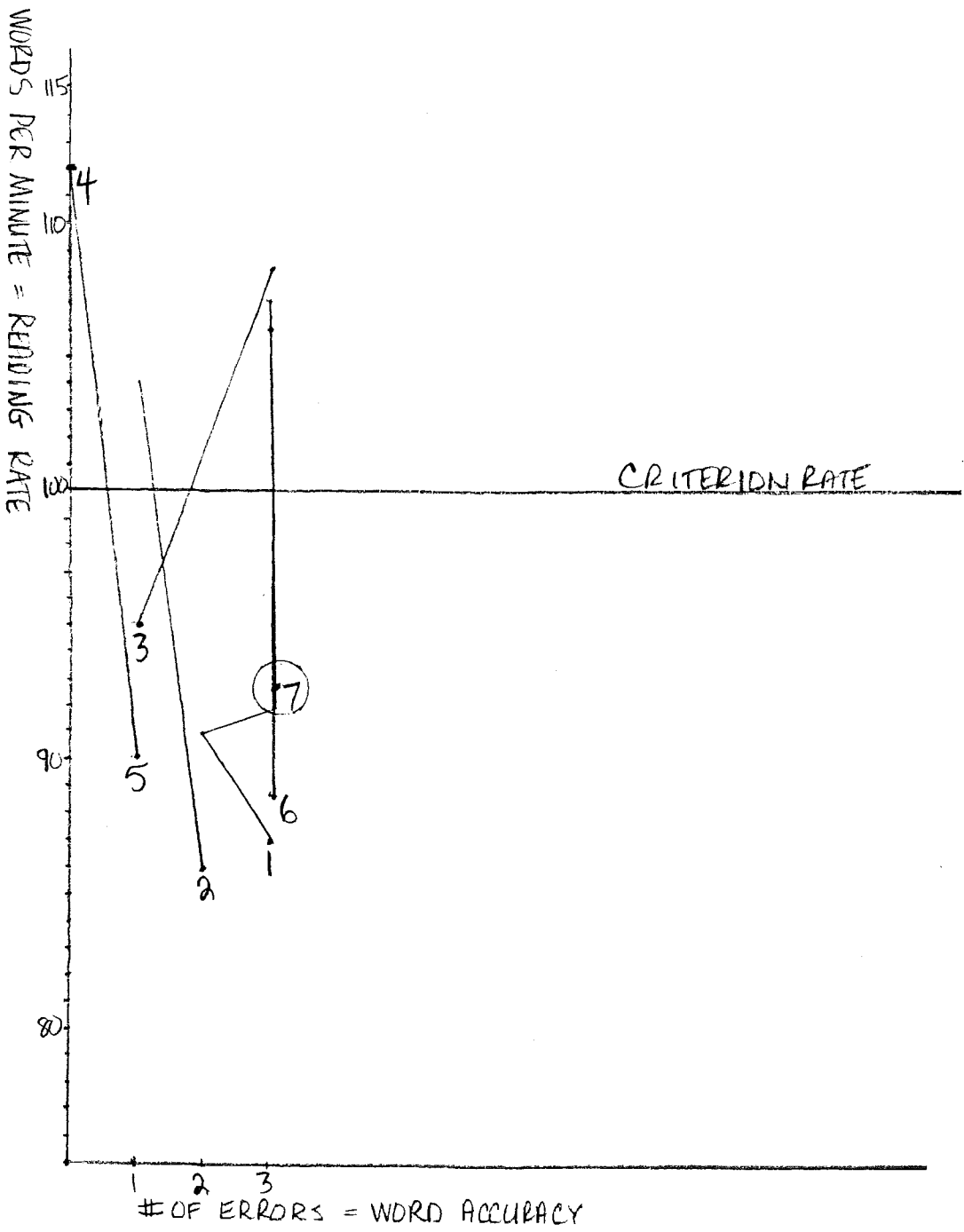
OF ERRORS = WORD ACCURACY

SUBJECT #5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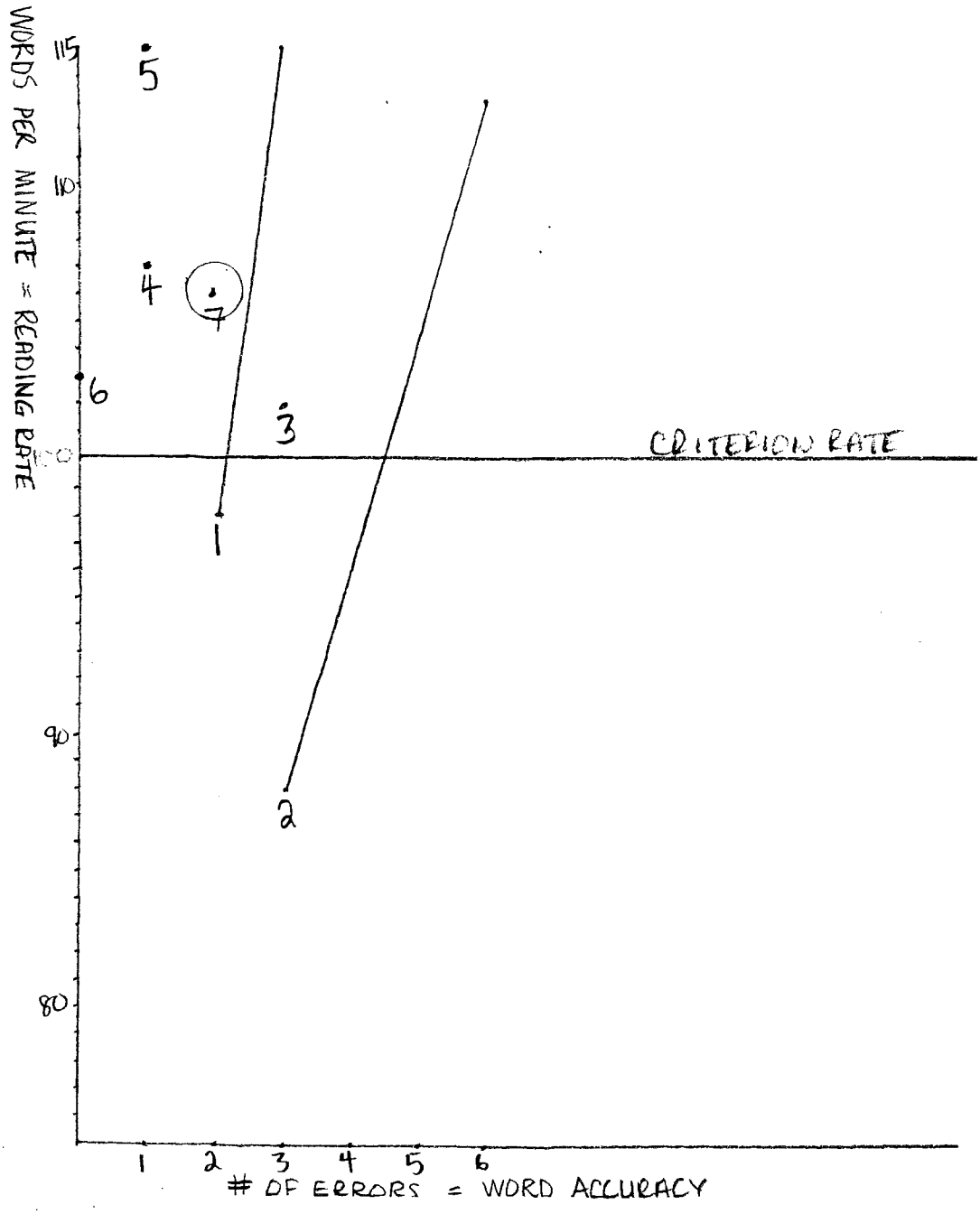
OF ERRORS = WORD ACCURACY

SUBJECT#6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OF ERRORS = WORD ACCURACY